I CLAIM:

1. A pointing device for controlling an electronic device, comprising:

a wheel that is arranged to provide a region of nonconductivity within a conductive inner surface of the wheel such that the region of nonconductivity orbits about the axis of rotation of the wheel in conjunction with rotation of the wheel;

a captivated shaft that is arranged within the wheel along the axis of rotation of the wheel and comprises switch contacts that are arranged to make and break contact with the conductive inner surface of the wheel in response to the region of nonconductivity orbiting about the captivated shaft; and

a frame that is arranged to captivate the captivated shaft such that the captivated shaft is prevented from rotating in conjunction with the rotation of the wheel.

2. The pointing device of claim 1, wherein the frame is further arranged to captivate the captivated shaft such that the captivated shaft is free to move in a direction that is substantially perpendicular to the axis of rotation of the wheel.

3. The pointing device of claim 1, wherein the wheel is further arranged to provide a second region of nonconductivity within a conductive inner surface of the wheel such that the second region of nonconductivity orbits about the axis of rotation of the wheel in conjunction with rotation of the wheel, and wherein the switch contacts of the captivated shaft are further arranged to make and break contact with the conductive inner surface of the wheel in response to the second region of nonconductivity orbiting about the captivated shaft.

4. The pointing device of claim 1, wherein the captivated shaft is further arranged to provide a ground contact that is arranged to maintain electrical contact with the conductive inner surface of the wheel during a complete revolution of the wheel.

5. The pointing device of claim 4, wherein the conductive inner surface of the wheel and the ground contact are arranged to provide detent positions during rotation of the wheel.

6. The pointing device of claim 1, wherein the outer surface of the wheel comprises a plastic material.

7. The pointing device of claim 6, wherein the inner surface of the wheel is a metal sleeve and the first region of nonconductivity is a void within the metal sleeve.

8. The pointing device of claim 1, wherein the frame is further arranged to mount on a substrate of an electrical circuit.

9. The pointing device of claim 1, wherein the frame is further arranged to captivate the captivated shaft such that the captivated shaft is free to move in a direction that is substantially perpendicular to the axis of rotation of the wheel, and wherein the substrate of the electrical circuit comprises switches that are configured to make and break contact in response to movement of the wheel in the direction that is substantially perpendicular to the axis of rotation of the wheel.

10. The pointing device of claim 9, further comprising a spring that is configured to impart a force to the wheel in a direction that is away from and substantially perpendicular to the axis of rotation of the wheel and is further configured to electrically couple with at least one switch contact of the captivated shaft.

11. A pointing device for controlling an electronic device, comprising:

a wheel means for providing a region of nonconductivity within a conductive inner surface of the wheel means such that the region of nonconductivity orbits about the axis of rotation of the wheel means in conjunction with rotation of the wheel means;

a shaft means arranged within the wheel means along the axis of rotation of the wheel means and comprises switch contact means for making and breaking contact with the conductive inner surface of the wheel in response to the region of nonconductivity orbiting about the shaft means; and

a frame means that is arranged to captivate the shaft means such that the shaft means is prevented from rotating in conjunction with the rotation of the wheel means.

12. The pointing device of claim 11, wherein the frame means is further arranged to captivate the shaft means such that the shaft means is free to move in a direction that is substantially perpendicular to the axis of rotation of the wheel means.

13. The pointing device of claim 11, wherein the wheel means further provides a second region of nonconductivity within a conductive inner surface of the wheel means such that the second region of nonconductivity orbits about the axis of rotation of the wheel means in conjunction with rotation of the wheel means, and wherein the switch contact means of the shaft means further makes and breaks contact with the conductive inner surface of the wheel means in response to the second region of nonconductivity orbiting about the shaft means.

14. The pointing device of claim 11, wherein the shaft means further to provides a ground contact means for maintaining electrical contact with the conductive inner surface of the wheel means during a complete revolution of the wheel means.

15. The pointing device of claim 14, wherein the conductive inner surface of the wheel means and the ground contact means provide detent positions during rotation of the wheel means.

16. The pointing device of claim 11, wherein the outer surface of the wheel means comprises a plastic material.

17. The pointing device of claim 16, wherein the inner surface of the wheel means is a metal sleeve and the first region of nonconductivity is a void within the metal sleeve.

18. The pointing device of claim 11, wherein the frame means further is mounted on a substrate of an electrical circuit.

19. The pointing device of claim 11, wherein the frame means captivates the shaft means such that the shaft means is free to move in a direction that is substantially perpendicular to the axis of rotation of the wheel means, and wherein the substrate of the electrical circuit comprises switches that are configured to make and break contact in response to movement of the wheel means in the direction that is substantially perpendicular to the axis of rotation of the wheel means.

20. The pointing device of claim 9, further comprising a spring means for imparting a force to the wheel means in a direction that is away from and substantially perpendicular to the axis of rotation of the wheel means and for electrically coupling with the switch contact means of the shaft means.

21. An electronic device, comprising:

a wheel that is arranged to provide a region of nonconductivity within a conductive inner surface of the wheel such that the region of nonconductivity orbits about the axis of rotation of the wheel in conjunction with rotation of the wheel;

a captivated shaft that is arranged within the wheel along the axis of rotation of the wheel and comprises switch contacts that are arranged to make and break contact with the conductive inner surface of the wheel in response to the region of nonconductivity orbiting about the captivated shaft;

a frame that is arranged to captivate the captivated shaft such that the captivated shaft is prevented from rotating in conjunction with the rotation of the wheel; and

a processor that is arranged to receive electrical signals from the switch contacts.

22. The device of claim 21, wherein the processor is further arranged to change a displayed image in response to the received electrical signals.

23. The device of claim 22, further comprising a display that is arranged to display the displayed image.

24. The device of claim 21, further comprising an application program that is configured to select a particular data field displayed in a list in response to the received electrical signals.